



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,150	09/05/2000	Motoki Kobayashi	450101-02197	6966
20999 7590 08/22/2007 FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			EXAMINER CHOWDHURY, SUMAIYA A	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 08/22/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-6, 9-15 and 18 have been considered but are moot in view of the new ground(s) of rejection.

(a) Applicant argues that none of Oosterhout, Yeo, Hatori and Aoki, teach the newly added limitation "wherein the plurality of images...".

The Examiner disagrees with the Applicant. Hatori discloses the position of the images on the spiral are arranged such that the image having the latest time is displayed behind an image having an earlier time. The size of the plurality of images gradually decrease as the center of the spiral is approached; the smaller the image becomes, the less visible it is. Hence, the images gradually fade towards the center of the spiral. The spiral is three dimensional such that the smaller the wind, the further away its images are from the user. Referring to fig. 11, the smaller image 1103 (background image compared to image 1102) on the smaller wind is still visible to the user although it is smaller and on a farther wind compared to larger image 1102 on the closer wind – col. 13, lines 1-10. Accordingly, it gives a sense of depth to the user so that the user can intuitively have a sense of temporal order. (see Fig. 4 & 9; col. 5, lines 15-31, col. 6, line 62- col. 7, line 7, lines 28-33, col. 9, lines 9-20, 37-41).

### ***Claim Objections***

2. Claims 3, 4, 9, and 13 are objected to because of the following informalities:

Art Unit: 2623

In each of the above mentioned claims on line 1, change "Previously Presented Currently Amended" to -- Previously Presented --.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 9-15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oosterhout et al (US 6,405,371) in view of Yeo et al. (US 6,219,837) and further in view of Hatori et al. (US 5,977,974) and further in view of Aoki et al. (US 6,253,218).

As for claims 1 and 10, Oosterhout discloses method of navigating through television programs is disclosed, where a television receiver displays a mosaic image with sub-images representing the available programs (See Abstract). The claimed limitation of "image display control means for controlling the display of plurality of images generated, independent of the image data source" is met by Figure 1, Item 24. The claimed limitations of "focus setting means for setting a focus on an image positioned at an area surrounded by a frame, among the plurality of images displayed; and", "selection means for

Art Unit: 2623

selecting an image set by the focus setting means, independent of the image data source" and "wherein one or more of the images are modified relative to the displayed image" are met by Figure 4. "In a step 303, the microprocessor receives cursor control commands from the remote control device and causes the graphics generator to display a cursor on screen. The cursor may take any convenient form. In FIG. 4, the cursor is shown as a framework around a selectable display item, such as a framework 45a around a sub-image or a framework 45b around an on-screen button. While moving the cursor across the sub-images on the mosaic screen with the cursor control keys (261 in FIG. 1), the receiver reproduces the audio signal of the associated television program" (Col 3, Lines 38-48; Also see: Col 2, Lines 28-37). Oosterhout further discloses providing image data from one of a plurality of image data sources as can be seen in Figure 2 so as to allow the user to navigate through television programs, where each channel is interpreted to be an image data source. The "microprocessor processes, in a step 307, the data which links the position of each sub-image in the mosaic signal MOS with the program number n of the associated television program TV-n, and applies the relevant program number to the demodulator and demultiplexer. The control program then returns to the step 301 to await a new EPG command" (Col 3, Lines 60-64).

Oosterhout fails to explicitly disclose displaying a plurality of indexing images.

Yeo teaches the use of indexing images or summary frames so as to provide quick hyperlinking to a past or future portion of the video. "These

Art Unit: 2623

summary frames depict key scenes from the past which aid the viewer in quickly ascertaining the current plot or theme of the video program" (Col 3, Lines 28-31). Consequently, it would have been clearly obvious to one of ordinary skill in the art to implement Oosterhout with the use of indexing images or summary frames so as to provide quick hyperlinking to a past or future portion of the video.

The combined teaching fails to explicitly disclose image generation means for generating a plurality of images which are sequential and arranged spirally, based on image data, and for generating the plurality of images such that an image at a second time point is larger than an image at a first time point, and wherein the image is switched to a display of a child screen when the image become equal to or larger than the predetermined value, wherein the plurality of images are arranged such that the elapsed time is depicted and the images gradually fade toward the center of the spiral from the outer circumferential side such that background images are visible;

Hatori discloses image generation means for generating a plurality of images which are sequential and arranged spirally (Col 19, Lines 40-65+), based on the image data input, and for generating the plurality of images such that an image at a second time point is larger than an image at a first time point, among the plurality of images which are sequential and arranged spirally (Col 20, Lines 1-50) so a user can easily have a sense of time interval or depth so that the user can intuitively have a sense of temporal order (Col 2, Lines 38-53).

Hatori further discloses wherein the image is switched to a display of a child screen when the image becomes equal to or larger than the predetermined

value (reads on the displacement of the icons based on the current position of the cursor displayed on a particular icon and when the button of the selecting device is clicked in which the icons of the spiral will move forward or inward. As such, the clicked icon will be replaced by the following preceding/succeeding icons based on the distance between the cursor position and the center of the window that dictates the number of icons can be moved; see Col. 11, lines 40-67).

Hatori further discloses the position of the images on the spiral are arranged such that the image having the latest time is displayed behind an image having an earlier time. The size of the plurality of images gradually decrease as the center of the spiral is approached; the smaller the image becomes, the less visible it is. Hence, the images gradually fade towards the center of the spiral. The spiral is three dimensional such that the smaller the wind, the further away its images are from the user. Referring to fig. 11, the smaller image 1103 (background image compared to image 1102) on the smaller wind is still visible to the user although it is smaller and on a farther wind compared to larger image 1102 on the closer wind – col. 13, lines 1-10. Accordingly, it gives a sense of depth to the user so that the user can intuitively have a sense of temporal order. (see Fig. 4 & 9; col. 5, lines 15-31, col. 6, line 62-col. 7, line 7, lines 28-33, col. 9, lines 9-20, 37-41).

Consequently, it would have been clearly obvious to one of ordinary skill in the art to implement the combined teaching with the above mentioned limitations for the stated advantage.

The combined teaching of Oosterhout, Yeo and Hatori fails to explicitly disclose "wherein said image is enlarged until an image becomes equal to or larger than a predetermined value which renders the image gradually transparent in view of said plurality of images displayed".

Aoki teaches an image that is enlarged until an image becomes equal to or larger than a predetermined value, which renders the image gradually transparent in view of said plurality of images displayed so as to eliminate the inconvenience to the user of having obscured images (Col 18, Lines 8-65; Col. 17, Lines 18-31).

Consequently, it would have been clearly obvious to one of ordinary skill in the art to implement the combined teaching with an image that is enlarged until an image becomes equal to or larger than a predetermined value, which renders the image gradually transparent in view of said plurality of images displayed for the stated advantage.

Claim 2 and 11, with respect to Hatori, the images are generated such that the image at the first time point is earlier than an image at the second time point. "On the spiral 104, data icons representing data which are sensed or generated at an earlier time than time assigned to the end point of the outermost curve of the spiral are arranged from the outside toward the inside of the spiral in descending order of time" (Col 5, Lines 18-26).



Claim 3 and 12, the Oosterhout et al. reference discloses the fading of sub-images so as to accentuate the non-faded sub-images. "In an advantageous embodiment, the sub-images representing the desired program are distinguished from the others by reducing the visibility of the other sub-images. In this embodiment, the microprocessor causes the brightness mask generator (30 in FIG. 1) to generate a brightness mask signal B which reduces the brightness of the displayed video signal in those screen areas where the sub-images of the non-desired television programs are displayed" (Col 4, Lines 21-28).

Claim 4 and 13, the Oosterhout et al. reference discloses a frame of predetermined size responsive to the use input so as to indicate the user selection. "In a step 303, the microprocessor receives cursor control commands from the remote control device and causes the graphics generator to diSplay a cursor on screen. The cursor may take any convenient form. In FIG. 4, the cursor is shown as a framework around a selectable display item, such as a framework 45a around a sub-image or a framework 45b around an on-screen button. While moving the cursor across the sub-images on the mosaic screen with the cursor control keys (261 in FIG. 1), the receiver reproduces the audio signal of the associated television program" (Col 3, Lines 38-48).

Claims 5-6 and 14-15, the image data moves in both a radial and circumferential direction as defined by a spiral shown in Figure 4, Item 104. "In an advantageous embodiment, the sub-images representing the desired program

Art Unit: 2623

are distinguished from the others by reducing the visibility of the other sub-images. In this embodiment, the microprocessor causes the brightness mask generator (30 in FIG. 1) to generate a brightness mask signal B which reduces the brightness of the displayed video signal in those screen areas where the sub-images of the non-desired television programs are displayed" (Col 4, Lines 21-28).

Claim 9 and 18, the Hatori et al. reference discloses the image display control means generates a background image which radially spreads from a center of a spiral constructed by the plurality of images, and makes the image display control means display the background image. The spiral is three dimensional such that the smaller the wind, the further away its images are from the user. Referring to fig. 11, the smaller image 1103 (background image compared to image 1102) on the smaller wind is still visible to the user although it is smaller and on a farther wind compared to larger image 1102 on the closer wind – col. 13, lines 1-10.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2623

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sumaiya A. Chowdhury whose telephone number is (571) 272-8567. The examiner can normally be reached on Mon-Fri, 9-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAC

  
**ANDREW Y. KOENIG**  
**PRIMARY PATENT EXAMINER**